

Vibronic

Point level detection

Liquiphant FTL50H

Compact vibration point level switch for liquids especially in the food and life sciences industry



More information and current pricing:

www.endress.com/FTL50H

Benefits:

- International hygienic certificates (3-A, EHEDG, ASME BPE). FDA-conformed material
- Electro-polished and passivated surface finishing
- International explosion protection certificates and overfill protection certificate (WHG)
- No mechanically moving parts: no maintenance, no wear, long operating life.
Monitoring of fork for damage: guaranteed function
- Use in safety systems requiring functional safety to SIL2/SIL3 in accordance with
IEC 61508/IEC 61511-1
- No calibration required, easy to start up
- Variety of standardized hygienic process connections for hygiene sensitive applications

Specs at a glance

- **Process temperature** -50 °C...+150 °C (-58 °F...+302 °F)
- **Process pressure / max. overpressure limit** Vacuum...64 bar (Vacuum...928 psi)
- **Min. density of medium** 0.5g/cm³ (0.4g/cm³ optional)

Field of application: Liquiphant FTL50H is a point level switch for use in hazardous areas with all international certificates. Especially useable in the food and life sciences industry with hygienic certificates (3-A, EHEDG, ASME BPE). FTL50H offers functional safety SIL2/SIL3. Reliable

measurement values, not affected by: changing media properties, flow, turbulences, gas bubbles, foam, vibrations or build-up.

Features and specifications

Point Level / Liquids

Measuring principle

Vibration Liquids

Characteristic / Application

Premium device for point level detection
in hygienic/aseptic applications.
Focus Food & Beverage and Life Sciences.
Compact sensor version,
Modular & completely welded housing concept,
Wide range of certificates.

Specialities

Plug and play functionalities,
Surface finish: mechanical or electro-polished,
Density/Concentration measurement,
SIL 2/3 according to IEC 61508

Supply / Communication

PROFIBUS PA,
19 ..253V AC,
10...55V DC-PNP,
19...253V AC or 19...55V DC with relay DPDT,
8/16mA,
NAMUR,
PFM

Ambient temperature

-50 °C...+70 °C
(-58 °F...+158 °F)

Process temperature

-50 °C...+150 °C
(-58 °F...+302 °F)

Point Level / Liquids**Process pressure / max. overpressure limit**

Vacuum...64 bar
(Vacuum...928 psi)

Min. density of medium

0.5g/cm³
(0.4g/cm³ optional)

Main wetted parts

316L

Process connection

Threads (for weld-in adapter):
G3/4A, G1A.
Flange:
DN25...DN100
ASME 1"...4",
JIS 25A...100A

Process connection hygienic

Tri-Clamp,
DIN 11851, DIN11864-1
Ingold,
Flush mount,
DRD,
SMS1145,
Varivent (Varinline)

Sensor length

Compact sensor

Communication

PROFIBUS PA

Certificates / Approvals

ATEX, FM, CSA C/US, IEC Ex, TIIS, INMETRO,
NEPSI

Point Level / Liquids**Safety approvals**

Overfill protection WHG,
SIL 2/ SIL 3

Design approvals

Inspection certificate 3.1, EN10204,
CoC ASME BPE,
Conformity to cGMP,
EU Food Contact Material (EC) 1935/2004,
US Food Contact Material FDA CFR 21,
CN Food Contact Material GB 4806,
Declaration of Conformity ASME B31.3,
AD2000,
CRN approval

Hygienic approvals

3-A,
EHEDG,
CoC-ASME BPE

Marine approval

GL/ ABS/ DNV

Options

Customized settings (Density)

Components

FTL325P/FTL375P Interface PFM
FTL325N/FTL375N Interface NAMUR

Successor

FTL63

Density**Measuring principle**

Vibration Density

Density

Characteristic / Application

Premium device for density measurement in hygienic/aseptic applications.

Focus Food & Beverage and Life Sciences.

Compact sensor version.

Modular housing or completely welded compact housing.

Wide range of certificates.

Supply / Communication

via density controller FML621

Ambient temperature

-40 °C...70 °C (-40...158 °F)

Process temperature

0...80 °C (32...176 °F)

Process pressure

0...25 bar (0...362 psi)

Wetted parts

316L

Hygienic

3A

EHEDG

Sensor length

Compact sensor

Output

Pulse

Certificates / Approvals

ATEX, FM, CSA C/US, IEC Ex, TIIS, INMETRO, NEPSI

Density

Specialities

Density/Concentration measurement in combination with density controller FML621,
Surface finish: mechanical polished (up to 0.3 µm)

Components

Density Computer FML621

More information www.endress.com/FTL50H